United States Department of Agriculture
Natural Resources Conservation Service

Ecological Site Description

Site Type: Rangeland

Site Name: Steep Stony (SSt), 15-19" P.Z.

Site ID: R043BY270WY

Major Land Resource Area: 43B-Central Rocky Mountains

Physiographic Features

This site occurs on gentle to steep mountain slopes, mesas, valley bottoms, and fans.

Landform: hill sides, alluvial fans, ridges & stream terraces **Aspect:** commonly S and SW

	Minimum	Maximum	
Elevation (feet):	5600	8300	
Slope (percent):	5	70	(mostly 20-40%)
Water Table Depth (inches):	none within 60 inches		
Flooding:			
Frequency:	none	none	
Duration:	none	none	
Ponding:			
Depth (inches):	0	0	
Frequency:	none	none	
Duration:	none	none	
Runoff Class:	negligible	moderate	

Climatic Features

Annual precipitation ranges from 15-19 inches per year. Wide fluctuations may occur in yearly precipitation and result in more dry years than those with more than normal precipitation. Temperatures show a wide range between summer and winter and between daily maximums and minimums. This is predominantly due to the high elevation and dry air, which permits rapid incoming and outgoing radiation. Cold air outbreaks in winter move rapidly from northwest to southeast and account for extreme minimum temperatures. Extreme storms may occur during the winter, but most severely affect ranch operations during late winter and spring.

Prevailing winds are from the southwest, and strong winds are less frequent than over other areas of Wyoming. Occasional storms, however, can bring brief periods of high winds with gusts exceeding 50 mph.

Growth of native cool season plants begins about May 15 and continues to about August 15.

The following information is from the "Jackson" climate station:

	Minimum	Maximum	5 yrs. out of 10 between
Frost-free period (days):	12	60	July 9 – August 12
Freeze-free period (days):	42	100	June 20 – August 26

Annual Precipitation (inches): <11.98 >19.69 (2 years in 10)

Mean annual precipitation: 17.00 inches

Mean annual air temperature: 38.9°F (23.3°F Avg. Min. to 54.5°F Avg. Max.)

For detailed information visit the Natural Resources Conservation Service National Water and Climate Center at http://www.wcc.nrcs.usda.gov/cgibin/state.pl?state=wy website. Other climate stations representative of this precipitation zone include "Afton" in Lincoln County; and "Darwin Ranch" in Teton County.

Influencing Water Features

Wetland Description:	System	Subsystem	Class	Sub-class
None	None	None	None	None

Stream Type: None

Representative Soil Features

The soils of this site are moderately deep to deep (greater than 20 inches), well-drained, dark colored, and stony and/or bouldery. They occur as steep mountain foot slopes with radiance usually greater than 30%. Coarse fragments are greater than 35 percent, by volume, within the first 20 inches of soil, usually increasing with depth. Roots penetrate the soil material readily, but are forced to detour around coarse fragments.

Major Soil Series correlated to this site includes: Greyback, Grobutte, Redmanson, and Rooset series.

Parent Material Kind: alluvium ,colluvium
Parent Material Origin: mixed
Surface Texture: loam
Surface Texture Modifier: gravelly
Subsurface Texture Group: loamy (skeletal)
Surface Fragments ≤ 3" (% Cover): 0-20
Surface Fragments > 3" (%Cover): 0-5
Subsurface Fragments ≤ 3" (% Volume): 10-30
Subsurface Fragments > 3" (% Volume): 0-15

	Minimum	Maximum
Drainage Class:	well	somewhat excessive
Permeability Class:	moderately slow	moderately rapid
Depth (inches):	20	60
Electrical Conductivity (mmhos/cm) ≤20":	0	4
Sodium Absorption Ratio ≤20":	0	0
Soil Reaction (1:1 Water) ≤20":	6.6	8.4
Soil Reaction (0.1M CaCl2) ≤20":	0	0
Available Water Capacity (inches) ≤30":	2	4
Calcium Carbonate Equivalent (percent) ≤20":	0	15

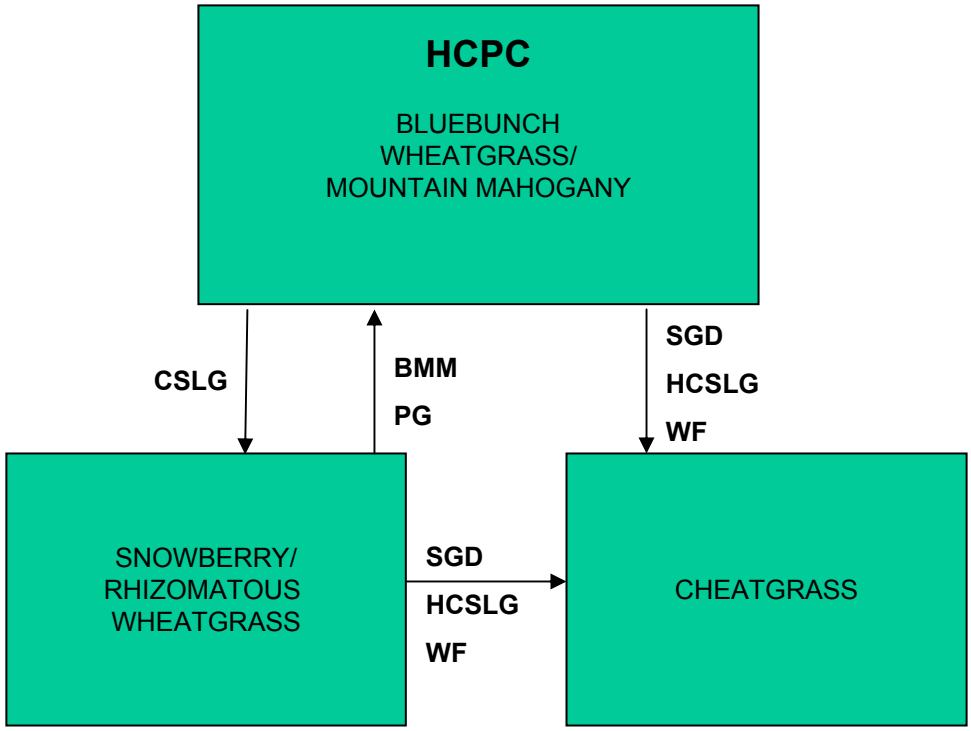
Plant Communities

Ecological Dynamics of the Site:

As this site deteriorates, species such as rhizomatous (mainly thickspike) wheatgrass, Idaho fescue, mountain big sagebrush, snowberry, and rabbitbrush increase. Cheatgrass and annual forbs often invade. Mountain mahogany and serviceberry as well as cool season bunchgrasses such as bluebunch wheatgrass and spike fescue will decrease in frequency and production.

The Historic Climax Plant Community (description follows the plant community diagram) has been determined by study of rangeland relic areas, or areas protected from excessive disturbance. Trends in plant communities going from heavily grazed areas to lightly grazed areas, seasonal use pastures, and historical accounts have also been used.

The following is a State and Transition Model Diagram that illustrates the common plant communities (states) that can occur on the site and the transitions between these communities. The ecological processes will be discussed in more detail in the plant community narratives following the diagram.



BMA – Brush Management (all methods)
BMC – Brush Management (chemical)
BMF – Brush Management (fire)
BMM – Brush Management (mechanical)
CSP – Chemical Seedbed Preparation
CSLG – Continuous Season-long Grazing
DR – Drainage
CSG – Continuous Spring Grazing
HB – Heavy Browse
HCSLG – Heavy Continuous Season-long Grazing
HI – Heavy Inundation
LPG – Long-term Prescribed Grazing
MT – Mechanical Treatment (chiseling, ripping, pitting)
NF – No Fire
NS – Natural Succession
NWC – Noxious Weed Control
NWI – Noxious Weed Invasion
NU – Nonuse
P&C – Plow & Crop (including hay)
PG – Prescribed Grazing
RPT – Re-plant Trees
RS – Re-seed
SGD – Severe Ground Disturbance
SHC – Severe Hoof Compaction
WD – Wildlife Damage (Beaver)
WF - Wildfire

Plant Community Composition and Group Annual Production

Reference Plant Community (HCPC)

COMMON NAME/GROUP NAME	SCIENTIFIC NAME	SYMBOL	Annual Production (Normal Year) Total: 1500		
			Group	lbs./acre	% Comp.
GRASSES AND GRASS-LIKES					
GRASSES/GRASSLIKES					
bluebunch wheatgrass	Pseudoroegneria spicata	PSSP6	1	375 - 750	25 - 50
Idaho fescue	Festuca idahoensis	FEID	2	75 - 225	5 - 15
Spike fescue	Leucopoa kingii	LEKI2	3	75 - 150	5 - 10
MISC. GRASSES/GRASSLIKES			**4**	**150 - 300**	**10 - 20**
basin wildrye	Leymus cinereus	LECI4	4	0 - 75	0 - 5
big bluegrass	Poa ampla (syn. P. secunda)	POAM (POSE)	4	0 - 75	0 - 5
bottlebrush squirreltail	Elymus elymoides	ELEL5	4	0 - 75	0 - 5
California oatgrass	Danthonia californica	DACA3	4	0 - 75	0 - 5
Canby bluegrass	Poa canbyi (syn. P. secunda)	POCA (POSE)	4	0 - 75	0 - 5
Columbia needlegrass	Achnatherum nelsonii	ACNE9	4	0 - 75	0 - 5
Letterman needlegrass	Achnatherum lettermanii	ACLE9	4	0 - 75	0 - 5
mountain bromegrass	Bromus marginatus	BRMA4	4	0 - 75	0 - 5
mountain muhly	Muhlenbergia montana	MUMO	4	0 - 75	0 - 5
mutton bluegrass	Poa fendleriana	POFE	4	0 - 75	0 - 5
needleleaf sedge	Carex duriuscula	CADU6	4	0 - 75	0 - 5
oniongrass	Melica bulbosa	MEBU	4	0 - 75	0 - 5
prairie junegrass	Koeleria macrantha	KOMA	4	0 - 75	0 - 5
Sandberg bluegrass	Poa secunda	POSE	4	0 - 75	0 - 5
slender wheatgrass	Elymus trachycaulis	ELTR7	4	0 - 75	0 - 5
spike trisetum	Trisetum spicatum	TRSP2	4	0 - 75	0 - 5
thickspike wheatgrass	Elymus lanceolatus ssp. lanceolatus	ELLAL	4	0 - 75	0 - 5
Threadleaf sedge	Carex filifolia	CAFI	4	0 - 75	0 - 5
timber oatgrass	Danthonia intermedia	DAIN	4	0 - 75	0 - 5
western needlegrass	Achnatherum occidentale	ACOC3	4	0 - 75	0 - 5
other perennial grasses (native)		2GP	4	0 - 75	0 - 5
FORBS			**5**	**75 - 150**	**5 - 10**
American vetch	Vicia americana	VIAM	5	0 - 75	0 - 5
Aster	Eucephalus & Symphyotrichum spp.	EUCEP2/ SYMPH4	5	0 - 75	0 - 5
balsamroot	Balsamorhiza sagittata	BASA3	5	0 - 75	0 - 5
biscuitroot	Lomatium spp.	LOMAT	5	0 - 75	0 - 5
bluebell	Mertensia spp.	MERTE	5	0 - 75	0 - 5
buckwheat	Eriogonum spp.	ERIOG	5	0 - 75	0 - 5
buttercup	Ranunculus spp.	RANUN	5	0 - 75	0 - 5
clover	Trifolium spp.	TRIFO	5	0 - 75	0 - 5
Daisy	Townsendia spp.	TOWNS	5	0 - 75	0 - 5
Fireweed	Chamerion angustifolium (syn. Epilobium a	CHAN9	5	0 - 75	0 - 5
fleabane	Erigeron spp.	ERIGE2	5	0 - 75	0 - 5
Gilia	Gilia spp.	GILIA	5	0 - 75	0 - 5
Groundsel	Packera spp.	PACKE	5	0 - 75	0 - 5
Hawksbeard	Crepis spp.	CREPI	5	0 - 75	0 - 5
little sunflower	Helianthus pumilus	HEPU3	5	0 - 75	0 - 5
Locoweed	Oxytropis spp.	OXYTR	5	0 - 75	0 - 5
milkvetch	Astragalus spp.	ASTRA	5	0 - 75	0 - 5
mule-ears	Wyethia amplexicaulis	WYAM	5	0 - 75	0 - 5
Oregon grape	Mahonia repens	MARE11	5	0 - 75	0 - 5
paintbrush	Castilleja spp.	CAST	5	0 - 75	0 - 5
penstemon	Penstemon spp.	PENST	5	0 - 75	0 - 5
phacelia	Phacelia spp.	PHACE	5	0 - 75	0 - 5
phlox	Phlox spp.	PHLOX	5	0 - 75	0 - 5
Pussytoes	Antennaria spp.	ANTEN	5	0 - 75	0 - 5
sandwort	Arenaria spp.	ARENA	5	0 - 75	0 - 5
Stinging nettle	Urtica dioica	URDI	5	0 - 75	0 - 5
stonecrop	Sedum spp.	SEDUM	5	0 - 75	0 - 5
stoneseed	Lithospermum spp.	LITHO3	5	0 - 75	0 - 5
Thistle	Cirsium spp.	CIRSI	5	0 - 75	0 - 5
Valerian (tobacco root)	Valeriana spp.	VALER	5	0 - 75	0 - 5
Yarrow (common & western)	Achillea millefolium	ACMI2	5	0 - 75	0 - 5
other perennial forbs (native)		2FP	5	0 - 75	0 - 5
TREES/SHRUBS					
mountain mahogany	Cercocarpus spp.	CERCO	6	75 - 300	5 - 20
serviceberry	Amelanchier alnifolia	AMAL2	7	15 - 150	1 - 10
MISC. SHRUBS			**8**	**75 - 150**	**5 - 10**
big sagebrush	Artemisia tridentata	ARTR2	8	0 - 75	0 - 5
bitterbrush	Purshia tridentata	PUTR2	8	0 - 75	0 - 5
green rabbitbrush	Chrysothamnus viscidiflorus	CHVI8	8	0 - 75	0 - 5
Low sagebrush	Artemisia arbuscula ssp. arbuscula	ARAR8	8	0 - 75	0 - 5
snowberry	Symphoricarpus occidentalis	SYOC	8	0 - 75	0 - 5
Thimbleberry	Rubus parviflorus	RUPA	8	0 - 75	0 - 5
threetip sagebrush	Artemisia tripartita	ARTR4	8	0 - 75	0 - 5

This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic factors.

Plant Community Narratives

Following are the narratives for each of the described plant communities. These plant communities may not represent every possibility, but they probably are the most prevalent and repeatable plant communities. The plant composition tables shown above have been developed from the best available knowledge at the time of this revision. As more data is collected, some of these plant communities may be revised or removed, and new ones may be added. None of these plant communities should necessarily be thought of as "Desired Plant Communities". According to the USDA NRCS National Range and Pasture Handbook, Desired Plant Communities (DPC's) will be determined by the decision-makers and will meet minimum quality criteria established by the NRCS. The main purpose for including any description of a plant community here is to capture the current knowledge and experience at the time of this revision.

Bluebunch Wheatgrass/Mountain Mahogany Plant Community (HCPC)

The interpretive plant community for this site is the Historic Climax Plant Community. This state evolved with grazing by large herbivores and is suited for grazing by domestic livestock. Potential vegetation is about 55% grasses or grass-like plants, 10% forbs, and 35% woody plants.
The major grasses include bluebunch wheatgrass, Idaho fescue, and spike fescue. Other grasses and grasslikes include basin wildrye, Sandberg, Canby, big, and mutton bluegrass, prairie junegrass, Letterman and Columbia needlegrass, bottlebrush squirreltail, California and timber oatgrass, mountain brome, oniongrass, mountain muhly, spike trisetum, slender and rhizomatous wheatgrass, and needleleaf sedge. Mountain mahogany and serviceberry are the dominant woody plants. Other woody plants include bitterbrush, low, threetip, and mountain big sagebrush, snowberry, and green rabbitbrush.

A typical plant composition for this state consists of bluebunch wheatgrass 25-50%, Idaho fescue 5-15%, spike fescue 5-10%, other grasses and grass-like plants 10-20%, perennial forbs 5-10%, true mountain mahogany 5-20%, serviceberry 1-10%, and 5-10% other woody species. Ground cover, by ocular estimate, varies from 40-45%.

The total annual production (air-dry weight) of this state is about 1500 pounds per acre, but it can range from about 1100 lbs./acre in unfavorable years to about 1900 lbs./acre in above average years.

The following is the growth curve of this plant community expected during a normal year:
Growth curve number: WY0201
Growth curve name: 15-19W, UPLAND SITES
Growth curve description: ALL UPLAND SITES

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0	0	0	0	10	35	30	20	5	0	0	0

(Monthly percentages of total annual growth)

The state is stable and well adapted to the Central Rocky Mountains climatic conditions. The diversity in plant species allows for high drought resistance. This is a sustainable plant community (site/soil stability, watershed function, and biologic integrity).

Transitions or pathways leading to other plant communities are as follows:

- Continuous Season-Long Grazing will convert this plant community to the *Snowberry/Rhizomatous Wheatgrass Sage State.*
- Wildfire or Severe Ground Disturbance followed by Heavy, Continuous Season-long Grazing will convert this plant community to the *Cheatgrass State.*

Snowberry/Rhizomatous Wheatgrass Plant Community
This plant community is a result of improper grazing management practices. Snowberry, Rocky Mountain juniper, mountain big sagebrush, limber pine, and other woody species dominate this community, often exceeding 80% of the annual production. Rhizomatous wheatgrass and annual forbs make up the majority of the understory.

The total annual production (air-dry weight) of this state is about 800 pounds per acre, but it can range from about 400 lbs./acre in unfavorable years to about 1200 lbs./acre in above average years.

The following is the growth curve of this plant community expected during a normal year:
Growth curve number: WY0201
Growth curve name: 15-19W, UPLAND SITES
Growth curve description: ALL UPLAND SITES

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0	0	0	0	10	35	30	20	5	0	0	0

(Monthly percentages of total annual growth)

Soil erosion is accelerated because of increased bare ground. The biotic community has been compromised, but is relatively stable. The watershed is functioning, but is at risk of further degradation. Water flow patterns and pedestals are obvious. Infiltration is reduced and runoff is increased.

Transitional pathways leading to other plant communities are as follows:

- Mechanical Brush Management followed by deferment for 1 to 2 years as part of a Prescribed Grazing plan will return this state to near *Historic Climax Plant Community (Bluebunch Wheatgrass/Mountain Mahogany State).* Care should be taken when planning brush management to consider wildlife habitat and critical winter ranges.
- Wildfire or Severe Ground Disturbance followed by Heavy, Continuous Season-long Grazing will convert this plant community to the *Cheatgrass State.*

Cheatgrass Plant Community
This plant community is the result of wildfire or severe ground disturbance. Cheatgrass invades, effectively decreasing the fire interval (fewer years between fire events) and limiting the ability for non-sprouting woody plants to reestablish. Other species include green rabbitbrush and rhizomatous wheatgrass.

The total annual production (air-dry weight) of this state is about 500 pounds per acre, but it can range from about 200 lbs./acre in unfavorable years to about 800 lbs./acre in above average years.

The following is the growth curve of this plant community expected during a normal year:
Growth curve number: WY0201
Growth curve name: 15-19W, UPLAND SITES
Growth curve description: ALL UPLAND SITES

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0	0	0	0	10	35	30	20	5	0	0	0

(Monthly percentages of total annual growth)

The state is vulnerable to excessive erosion. The biotic integrity of this plant community is at risk depending on how far a shift has occurred in plant composition toward green rabbitbrush, cheatgrass, and annual forbs. The watershed is at risk as bare ground increases.

Transitional pathways leading to other plant communities are as follows:
It is not often practicable or economically feasible to convert this plant community.

Ecological Site Interpretations

Animal Community – Wildlife Interpretations

Bluebunch Wheatgrass/Mountain Mahogany Plant Community (HCPC): This plant community provides excellent thermal and escape cover for wintering mule deer and elk. Year-round habitat is provided for mule deer, elk, bobcat, mountain lion, cottontail rabbits, jackrabbits, and many birds such as the black-throated sparrow, lark sparrow, green-tailed towhee, and neo-tropical migrants. Mountain mahogany provides good thermal cover and nesting habitat for many bird species.

Snowberry/Rhizomatous Wheatgrass Plant Community: This plant community may be useful for the same wildlife that would use the Historic Climax Plant Community. However, the plant community composition is much less diverse, and thus, less apt to meet the seasonal needs of these animals.

Cheatgrass Plant Community: This plant community exhibits a low level of plant species diversity. In most cases it is not a desirable plant community to select as a wildlife habitat management objective.

Animal Preferences (Quarterly - 1,2,3,4) for commonly occuring plants in MLRA 43B, 15-19W

COMMON NAME/GROUP NAME	SCIENTIFIC NAME	SYMBOL	Cattle	Sheep	Horses	Mule Deer	Antelope	Elk	Moose
GRASSES/GRASSLIKES									
Alkali bluegrass	Poa juncifolia (syn. to P. secunda)	POJU	DDDD	PPPP	DDDD	PPPP	PPPP	DDDD	DDDD
Alkali muhly	Muhlenbergia asperifolia	MUAS	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Alkali sacaton	Sporobolus airoides	SPAI	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP	DDDD
Alpine timothy	Phleum alpinum	PHAL2	PPPP	PPPP	PPPP	DDDD	UUUU	PPPP	DDDD
American mannagrass	Glyceria grandis	GLGR	DDDD	UUUU	DDDD	UUUU	UUUU	DDDD	DDDD
Baltic rush	Juncus balticus	JUBA	DDDD	UUUU	DDDD	UUUU	UUUU	DDDD	UUUU
Basin wildrye	Leymus cinereus	LECI4	PPPP	PPPP	PPPP	DDDD	DDDD	PPPP	DDDD
Beaked sedge	Carex rostrata	CARO6	DDUD	UUUU	DDUD	UUUU	UUUU	DDUD	DDUD
Bearded wheatgrass	Elymus trachycaulus ssp. subsecundus	ELTRS	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP	DDDD
Bentgrass	Agrostis spp.	AGROS2	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP	DDDD
Big bluegrass	Poa ampla (syn. to Poa secunda)	POAM	PPPP	DDDD	PPPP	PPPP	PPPP	PPPP	PPPP
Blue wildrye	Elymus glaucus	ELGL	PPPP	DDDD	PPPP	DDDD	UUUU	PPPP	DDDD
Bluebunch wheatgrass	Pseudoroegneria spicata	PSSP6	PPPP	PPPP	PPPP	DDDD	DDDD	PPPP	DDDD
Bluejoint reedgrass	Calamagrostis canadensis	CACA4	PPPP	DDDD	PPPP	UUUU	UUUU	PPPP	DDDD
Bottlebrush squirreltail	Elymus elymoides	ELELE	UDUU	UDUU	UDUU	UDUU	UDUU	UDUU	NNNN
Bulrush	Scirpus spp.	SCIRP	DDDD	UUUU	UUUU	UUUU	UUUU	DDDD	DDDD
California oatgrass	Danthonia californica	DACA3	PPPP	DDDD	DDDD	DDDD	DDDD	PPPP	DDDD
Canby bluegrass	Poa canbyi (syn. to Poa secunda)	POCA	PPPP	DPDD	DPDD	DPDD	DPDD	PPPP	DPPD
Cattail	Typha spp.	TYPHA	DUUD	DUUD	DUUD	DUUD	DUUD	DUUD	DUUD
Columbia needlegrass	Achnatherum nelsonii	ACNE9	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP	DDDD
Cusick bluegrass	Poa cusickii	POCU3	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP
Dunehead sedge	Carex phaeocephala	CAPH2	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Fowl bluegrass	Poa palustris	POPA2	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Green needlegrass	Nassella viridula	NAVI4	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Idaho fescue	Festuca idahoensis	FEID	DDPD	DDPD	DDPD	DDDD	DDDD	DDPD	DDDD
Indian ricegrass	Achnatherum hymenoides	ACHY	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP
Inland saltgrass	Distichlis spicata	DISP	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Inland sedge	Carex interior	CAIN11	DDDD	DDDD	DDDD	UUUU	UUUU	DDDD	DDDD
Letterman needlegrass	Achnatherum lettermanii	ACLE9	UPUU	UDUU	UPUU	DDDD	DDDD	DDDD	DDDD
Little barley	Hordeum pusillum	HOPU	UDUU	UDUU	UDUU	UDUU	UDUU	UDUU	UDUU
Mat muhly	Muhlenbergia richardsonis	MURI	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Montana wheatgrass	Elymus albicans	ELAL7	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Mountain brome	Bromus marginatus	BRMA4	PPPP	PPPP	DDDD	DDDD	NNNN	PPPP	DDDD
Mountain muhly	Muhlenbergia montana	MUMO	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Mutton bluegrass	Poa fendleriana	POFE	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP
Nebraska sedge	Carex nebrascensis	CANE2	PPPP	PPPP	PPPP	PPPP	DDDD	PPPP	DDDD
Needleleaf sedge	Carex duriuscula	CADU6	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Nodding brome	Bromus porteri	BRPO2	PPPP	PPPP	DDDD	DDDD	UUUU	PPPP	DDDD
Northern reedgrass	Calamagrostis stricta ssp. inexpansa	CASTI3	PPPP	DDDD	PPPP	DDDD	UUUU	PPPP	DDDD
Nuttall's alkaligrass	Puccinellia nuttalliana	PUNU2	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP
One-spike oatgrass	Danthonia unispicata	DAUN	DDDD	PPPP	DDDD	PPPP	DDDD	DDDD	DDDD
Oniongrass	Melica bulbosa	MEBU	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP
Prairie junegrass	Koeleria macrantha	KOMA	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Pumpelly's brome	Bromus inermis ssp. pumpellianus	BRINP	PPPP	PPPP	DDDD	DDDD	UUUU	PPPP	DDDD
Redtop	Agrostis stolonifera	AGST2	UPDU	UPDU	UPDU	UPDU	UPDU	UPDU	UPDU
Reed canarygrass	Phalaris arundinacea	PHAR3	UDDU	UDDU	UDDU	UDDU	UDDU	UDDU	UDDU
Richardson's needlegrass	Achnatherum richardsonii	ACRI8	PPPP	PPPP	DDDD	DDDD	DDDD	PPPP	DDDD
Sandberg bluegrass	Poa secunda	POSE	UDDU	UDDU	UDDU	UDDU	UDDU	UDDU	UDDU
Shortawn foxtail	Alopecurus aequalis	ALAE	DDDU	DDDU	DDDU	DDDU	DDDU	DDDU	DDDU
Slender wheatgrass	Elymus trachycaulus	ELTR7	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP	DDDD
Spikefescue	Leucopoa kingii	LEKI2	PPPP	DDDD	PPPP	PPPP	DDDD	PPPP	DDDD
Spikerush	Eleocharis spp.	ELEOC	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Spike trisetum	Trisetum spicatum	TRSP2	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP	DDDD
Sun sedge	Carex inops ssp. heliophila	CAINH2	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP	DDDD
Tall mannagrass	Glyceria elata (syn. G. striata)	GLEL	DDDD	UUUU	DDDD	UUUU	UUUU	DDDD	DDDD
Thickspike wheatgrass	Elymus lanceolatus ssp. lanceolatus	ELMA7	DPDD	DDDD	DDDD	DDDD	DDDD	PDDP	DDDD
Threadleaf sedge	Carex filifolia	CAFI	DDDD	DDDD	DDDD	DDDD	DDDD	PDDP	DDDD
Timber oatgrass	Danthonia intermedia	DAIN	DDDD	DDDD	DDDD	UUUU	UUUU	DDDD	DDDD
Tufted hairgrass	Deschampsia caespitosa	DECA18	PPPP	PPPP	PPPP	DDDD	DDDD	PPPP	DDDD
Water sedge	Carex aquatilis ssp. aquatilis	CAAQA	UDUU	UDUU	UDUU	UDUU	UDUU	UDUU	UDUU
Western needlegrass	Achnatherum occidentale	ACOC3	PPPP	PPPP	PPPP	DDDD	DDDD	PPPP	DDDD
Western wheatgrass	Pascopyrum smithii	PASM	DPDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
FORBS									
American licorice	Glycyrrhiza lepidota	GLLE3	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
American bistort	Polygonum bistortoides	POB16	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
American vetch	Vicia americana	VIAM	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP	DDDD
Arnica	Arnica spp.	ARNIC	UUUU	UUUU	UUUU	DDDD	UUUU	UUUU	UUUU
Arrowgrass	Triglochin spp.	TRIGL	TTTT	TTTT	TTTT	TTTT	TTTT	TTTT	TTTT
Asters	Eucephalus & Symphyotrichum spp.	EUCEP2/SYMPH4	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Avens (prairie smoke)	Geum spp.	GEUM	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Balsamroot	Balsamorhiza spp.	BALSA	DPDD	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP
Bedstraw	Galium spp.	GALIU	UUUU	DDDD	UUUU	DDDD	DDDD	DDDD	UUUU
Biscuitroot	Lomatium spp.	LOMAT	DDDD	DDDD	UUUU	DDDD	DDDD	DDDD	DDDD
Bitterroot	Lewisia rediviva ssp. rediviva	LERER	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Bluebell	Mertensia spp.	MERTE	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Blue-eyed grass	Sisyrinchium spp.	SISYR	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Buckwheat	Eriogonum spp.	ERIOG	UUUU	DDDD	UUUU	UUUU	UUUU	UUUU	UUUU
Buttercup	Ranunculus spp.	RANUN	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Cinquefoil (herbaceous)	Potentilla spp.	POTEN	UUUU	UUUU	UUUU	UUDU	UUUU	UUUU	UUUU
Clover	Trifolium spp.	TRIFO	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP
Columbine	Aquilegia spp.	AQUIL	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Cow parsnip	Heralcleum maximum	HERAC	PPPP	PPPP	PPPP	PPPP	PPPP	DDDD	NNNN
Daisy	Townsendia spp.	TOWNS	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Deathcamas	Zigadenus venenosus	ZIVE	TTTT	TTTT	TTTT	TTTT	TTTT	TTTT	TTTT
Elephanthead lousewort	Pedicularis groenlandica	PEGR2	UUUU	DDDD	UUUU	DDDD	UUUU	UUUU	DDDD
Elk thistle	Cirsium foliosum	CIFO	UUDU	UUUU	UDPU	UDDU	UUUU	UDPU	UUUU
Evening-primrose	Oenothera spp.	OENOT	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Fireweed	Chamerion angustifolium	CHAN9	PPPP	DDDD	UUUU	PPPP	DDDD	PPPP	PPPP
Flax	Linum spp.	LINUM	UPDU	UPDU	UPDU	UPDU	UPDU	UPDU	UPDU
Fleabane	Erigeron spp.	ERIGE2	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Gentian	Gentiana spp.	GENTI	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Geranium	Geranium spp.	GERAN	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Gilia	Gilia spp.	GILIA	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Goldenaster	Heterotheca spp.	HETER8	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Goldenpea	Thermopsis spp.	THERM	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Goldenrod	Solidago spp.	SOLID	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Golden smoke	Corydalis aurea	COAU2	TTUU	TTUU	TTUU	TTUU	TTUU	TTUU	TTUU
Goldenweed, stemless	Stenotus acaulis ssp. acaulis	STACA	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Green gentian	Frasera speciosa	FRSP	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Groundsel	Packera spp.	PACKE	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Harebell (bellflower)	Campanula spp.	CAMPA	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Hawksbeard	Crepis spp.	CREPI	UUUU	PPPP	UUUU	DDDD	DDDD	UUUU	DDDD
Hawkweed	Hieracium spp.	HIERA	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Horsemint	Agastache spp.	AGAST	DDDD	DDDD	UUUU	DDDD	DDDD	DDDD	DDDD
Horsetail (scouring rush)	Equisetum spp.	EQUIS	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Iris (Rocky Mountain)	Iris missouriensis	IRMI	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU

Animal Preferences (Quarterly - 1,2,3,4) for commonly occuring plants in MLRA 43B, 15-19W

COMMON NAME/GROUP NAME	SCIENTIFIC NAME	SYMBOL	*Cattle*	*Sheep*	*Horses*	*Mule Deer*	*Antelope*	*Elk*	*Moose*
Larkspur (poisonous in spring before flowering)	Delphinium spp.	DELPH	DTDD	DTDD	DTDD	DTDD	DTDD	DTDD	DTDD
Little sunflower	Helianthus pumilus	HEPU3	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP
Locoweed	Oxytropis spp.	OXYTR	TTUU	TTUU	TTUU	TTUU	TTUU	TTUU	TTUU
Lupine (may be poisonous after seedpots mature)	Lupinus spp.	LUPIN	DDTT	DDTT	DDTT	DDTT	DDTT	DDTT	DDTT
Meadow-rue	Thalictrum occidentale	THOC	DDDD	PPPP	DDDD	PPPP	PPPP	DDDD	PPPP
Milkvetch	Astragalus spp.	ASTRA	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Minerscandle	Cryptantha spp.	CRYPT	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Mint (wild)	Mentha arvensis	MEAR4	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Monkeyflower	Mimulus spp.	MIMUL	UDUU	UDUU	UDUU	UDUU	UDUU	UDUU	UDUU
Monkshood	Aconitum spp.	ACONI	TTTT	TTTT	TTTT	TTTT	TTTT	TTTT	TTTT
Mountain dandelion	Agoseris spp.	AGOSE	DDDD	PPPP	DDDD	PPPP	DDDD	DDDD	DDDD
Mule-ears	Wyethis amplexicaulis	WYAM	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Mustard	Draba spp.	DRABA	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Nailwort	Paronychia spp.	PARON	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Onion (wild)	Allium spp.	ALLI4	DPDD	PPPP	DPDD	DPDD	PPPP	DPDD	DPDD
Oregon grape	Mahonia repens	MARE11	UUUU	DDDD	UUUU	PPPP	DDDD	DDDD	DDDD
Owl's-clover	Orthocarpus spp.	ORTHO	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Paintbrush	Castilleja spp.	CAST	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Peavine	Lathyrus spp.	LATHY	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Penstemon	Penstemon spp.	PENST	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP
Phacelia	Phacelia spp.	PHACE	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Phlox	Phlox spp.	PHLOX	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Plantain	Plantago spp.	PLANT	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Primrose	Primula spp.	PRIMU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Pussytoes	Antennaria spp.	ANTEN	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Ragwort (groundsel)	Senecio spp.	SENEC	TTTT	TTTT	TTTT	TTTT	TTTT	TTTT	TTTT
Sandwort	Arenaria spp.	ARENA	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Shooting star	Dodecatheon spp.	DODEC	DDDD	DDDD	UUUU	DDDD	UUUU	UUUU	UUUU
Starwort	Stellaria spp.	STELL	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Sego lily	Calochortus nuttallii	CANU3	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Smartweed (knotweed)	Polygonum spp.	POLYG4	UUUU	UUUU	UUUU	DDDD	UUUU	UUUU	UUUU
Sneezeweed, orange (rubberweed)	Hymenoxys spp.	HYMEN7	TTTT	TTTT	TTTT	TTTT	TTTT	TTTT	TTTT
Springbeauty	Claytonia spp.	CLAYT	UDUU	UDUU	UDUU	UDUU	UDUU	UDUU	UDUU
Stinging nettle	Urtica dioica	URDI	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Stonecrop	Sedum spp.	SEDUM	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Stoneseed	Lithospermum spp.	LITHO3	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Sunflower	Helianthus spp.	HELIA3	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP	PPPP
Sweetroot	Osmorhiza spp.	OSMOR	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Toadflax	Comandra umbellata	COUMP	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Valerian (tobacco root)	Valeriana spp.	VALER	DDDD	PPPP	DDDD	DDDD	DDDD	DDDD	DDDD
Violet	Viola spp.	VIOLA	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Water hemlock (spotted)	Cicuta maculata var. angustifolia	CIMAA	TTUU	TTUU	TTUU	TTUU	TTUU	TTUU	TTUU
Waterleaf	Hydrophyllum spp.	HYDRO4	DDDD	DDDD	DDDD	PPPP	DDDD	DDDD	DDDD
Western coneflower	Rudbeckia occidentalis	RUOC2	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Wild strawberry (false strawberry)	Fragaria vesca	FRVE	DDDD	PPPP	DDDD	PPPP	PPPP	DDDD	DDDD
Yarrow (common & western)	Achillea millefolium	ACMI2	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Yellowbell	Fritillaria pudica	FRPU2	UUUU	DUUU	UUUU	DUUU	UUUU	DUUU	UUUU
Yellow sneezeweed	Helenium autumnale	HEAU	TTTT	TTTT	TTTT	TTTT	TTTT	TTTT	TTTT
TREES, SHRUBS & HALF-SHRUBS									
Alpine laurel (bog kalmia)	Kalmia microphylla	KAMI	TTTT	TTTT	TTTT	TTTT	TTTT	TTTT	TTTT
Antelope bitterbrush	Purshia tridentata	PUTR2	PPPP	PPPP	DDDD	PPPP	PPPP	PPPP	PPPP
Aspen	Populus tremuloides	POTR5	DDDD	DDDD	DDDD	PPPP	DDDD	PPPP	PPPP
Basin big sagebrush	Artemesia tridentata ssp. tridentata	ARTRT	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Big sagebrush	Artemisia tridentata	ARTR2	DUUD	DDDD	UUUU	PPPP	PPPP	DDDD	DDDD
Black sagebrush	Artemesia nova	ARNO4	DDDD	PPPP	UUUU	DDDD	DDDD	DDDD	DDDD
Chokecherry (toxic in large amounts)	Prunus virginiana	PRVI	DTTD	DTTD	DDDD	PPPP	UUUU	DDDD	PPPP
Currant	Ribes spp.	RIBES	DDDD	DDDD	DDDD	PPPP	UUUU	DDDD	DDDD
Dogwood	Cornus spp.	CORNU	DDDD	DPDD	DDDD	DPDD	DDDD	DPDD	DPDD
Early (alkali) sage	Artemisia arbuscula ssp. longiloba	ARARL	UUUU	DUDD	UUUU	PUPP	PDDP	DUUD	UUUU
Elderberry	Sambucus spp.	SAMBU	DDDD	DDDD	UUUU	PPPP	UUUU	DDDD	DDDD
Fringed sagewort	Artemisia frigida	ARFR4	UUUU	UUUU	UUUU	UUUU	DDDD	UUUU	UUUU
Goldenweed, shrubby	Ericameria suffruticosus	ERSU13	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Greasewood (toxic in large amounts)	Sarcobatus vermiculatus	SAVE4	DUUD	DDDD	UUUU	DDDD	DDDD	DUUD	UUUU
Green (low) rabbitbrush	Chrysothamnus viscidiflorus	CHVI8	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Juniper, common	Juniperus communis var. depressa	JUCOD	UUUU	UUUU	UUUU	DUUD	UUUU	UUUU	UUUU
Juniper, Rocky Mountain	Juniperus scopulorum	JUSC2	UUUU	DUDD	UUUU	DUDD	UUUU	UUUU	UUUU
Limber pine	Pinus flexilis	PIFL2	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN	NNNN
Low sagebrush	Artemisia arbuscula ssp. arbuscula	ARAR8	DUUD	DDDD	UUUU	DDDD	DDDD	DDDD	DDDD
Mountain big sagebrush	Artemesia tridentata ssp. vaseyana	ARTRV	UUUU	DDDD	UUUU	DDDD	DDDD	UUUU	UUUU
Mountain mahogany	Cercocarpus spp.	CERCO	PPPP	PPPP	DDDD	PPPP	UUUU	PPPP	PPPP
Raspberry	Rubus idaeus	RUID	UUUU	UUUU	UUUU	DDDD	UUUU	UUUU	DDDD
Rubber rabbitbrush	Ericameria nauseosa	ERNA10	UUUU	PPPP	UUUU	DDDD	PPPP	DDDD	DDDD
Serviceberry	Amelanchier alnifolia	AMAL2	DDDD	PPPP	UUUU	PPPP	DDDD	DDDD	DDDD
Shrubby cinquefoil	Dasiphora floribunda	DAFL3	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Silverberry	Elaeagnus commutata	ELCO	DDUU	DDDD	UUUU	DDUU	DDDD	DDUU	PPPP
Silver sagebrush	Artemisia cana	ARCA13	UUUU	DDDD	UUUU	PPPP	PPPP	DDDD	DDDD
Snowberry (western)	Symphoricarpus occidentalis	SYOC	UUUU	UUUU	UUUU	DDDD	UUUU	UUUU	UUUU
Snowbrush ceanothus	Ceanothus velutinus	CEVE	UUUU	DDDD	UUUU	DDDD	UUUU	DDDD	UUUU
Spiked big sagebrush	Artemesia tridentata ssp. spiciformis	ARTRS2	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU
Thimbleberry	Rubus parviflorus	RUPA	UUUU	DDDD	UUUU	UDUU	UUUU	UDUU	DPDD
Three-tip sagebrush	Artemisia tripartitia	ARTR4	UUUU	DDDD	UUUU	UUUU	DDDD	UUUU	DDDD
True mountainmahogany	Cercocarpus montanus	CEMO2	PPPP	PPPP	DDDD	PPPP	UUUU	PPPP	PPPP
Water birch	Betula occidentalis	BEOC2	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD	DDDD
Wild rose	Rosa woodsii var. woodsii	ROWOW	DDDD	DDDD	UUUU	DDDD	DDDD	DDDD	DDDD
Willow, Bebbs	Salix bebbiana	SABE2	DDDD	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP
Willow, Blueberry	Salix myrtillifolia	SAMY	DDDD	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP
Willow, Booths	Salix boothii	SABO2	DDDD	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP
Willow, coyote (sandbar)	Salix exigua	SAEX	PPPP	PPPP	DDDD	PPPP	UUUU	PPPP	PPPP
Willow, Drummonds	Salix drummondiana	SADR	DDDD	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP
Willow, grayleaf	Salix glauca	SAGL	DDDD	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP
Willow, Geyers	Salix geyeriana	SAGE2	DDDD	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP
Willow, Lemmons	Salix lemmonii	SALE	DDDD	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP
Willow, peachleaf	Salix amygdaloides	SAAM2	PPPP	PPPP	DDDD	PPPP	UUUU	PPPP	PPPP
Willow, planeleaf (diamondleaf)	Salix planifolia	SAPL2	DDDD	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP
Willow, pussy	Salix discolor	SADI	DDDD	DDDD	DDDD	DDDD	UUUU	DDDD	DDDD
Willow, Scoulers	Salix scouleriana	SASC	PPPP	PPPP	DDDD	PPPP	DDDD	PPPP	PPPP
Willow, short-fruit (barrenground)	Salix brachycarpa	SABR	DDDD	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP
Willow, tweedy	Salix tweedyi	SATW	DDDD	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP
Willow, whiplash	Salix lucida ssp. Caudata	SALUC	DDDD	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP
Willow, interior	Salix interior	SAIN3	DDDD	PPPP	DDDD	PPPP	DDDD	DDDD	PPPP
Willow, wolf	Salix wolfii	SAWO	UUUU	UUUU	UUUU	UUUU	UUUU	UUUU	DDDD
willow, yellow	Salix lutea	SALU2	PPPP	PPPP	DDDD	PPPP	UUUU	PPPP	PPPP
Wyoming big sagebrush	Artemesia tridentata ssp. wyomingensis	ARTRW8	UUUU	DDDD	UUUU	PPPP	PPPP	UUUU	UUUU

N = not used; U = undesirable; D = desirable; P = preferred; T = toxic

Animal Community – Grazing Interpretations

The following table lists suggested stocking rates for cattle under continuous season-long grazing under normal growing conditions. These are conservative estimates that should be used only as guidelines in the initial stages of the conservation planning process. Often, the current plant composition does not entirely match any particular plant community (as described in this ecological site description). Because of this, a field visit is recommended, in all cases, to document plant composition and production. More precise carrying capacity estimates should eventually be calculated using this information along with animal preference data, particularly when grazers other than cattle are involved. Under more intensive grazing management, improved harvest efficiencies can result in an increased carrying capacity. If distribution problems occur, stocking rates must be reduced to maintain plant health and vigor.

Plant Community	Production (lb./ac)	Carrying Capacity* (AUM/ac)
Bluebunch Wheatgrass/Mountain Mahogany (HCPC)	1100-1900	.45
Snowberry/Rhizomatous Wheatgrass	400-1200	.25
Cheatgrass	200-800	.15

* - Continuous, season-long grazing by cattle under average growing conditions.

Grazing by domestic livestock is one of the major income-producing industries in the area. Rangeland in this area may provide yearlong forage for cattle, sheep, or horses. During the dormant period, the forage for livestock use needs to be supplemented with protein because the quality does not meet minimum livestock requirements.

Hydrology Functions

Water is the principal factor limiting forage production on this site. This site is dominated by soils in hydrologic group B and C, with localized areas in hydrologic group D. Infiltration ranges from moderately slow to moderate. Runoff potential for this site varies from low to moderate depending on soil hydrologic group and ground cover (refer to Part 630, NRCS National Engineering Handbook for detailed hydrology information).

Rills and gullies should not typically be present. Water flow patterns should be barely distinguishable if at all present. Pedestals are only slightly present in association with bunchgrasses. Litter typically falls in place, and signs of movement are not common. Chemical and physical crusts are rare to non-existent. Cryptogamic crusts are present, but only cover 1-2% of the soil surface.

Recreational Uses

This site provides hunting opportunities for upland game species.

Wood Products

No appreciable wood products are present on the site.

Other Products

Supporting Information

Associated Sites

Shallow Loamy	R043BY262WY
Stony	R043BY272WY

Similar Sites

R043BY212WY – Gravelly (Gr) 15-19W has lower production and different shrub species.
R043BY272WY – Stony (St) 15-19W has lower production and different shrub species.
R043BY208WY – Coarse Upland (CU) 15-19W has higher production, larger coarse fragments (boulders), and different shrub species.

Inventory Data References (narrative)

Information presented here has been derived from NRCS clipping data and other inventory data. Field observations from range trained personnel were also used. Those involved in developing this site include: Bill Christensen, Range Management Specialist, NRCS; Karen Clause, Range Management Specialist, NRCS; and Everet Bainter, Range Management Specialist, NRCS. Other sources used as references include: USDA NRCS Water and Climate Center, USDA NRCS National Range and Pasture Handbook, and USDA NRCS Soil Surveys from various counties.

Inventory Data References

Data Source	Number of Records	Sample Period	State	County
SCS-RANGE-417	58	1966-1986	WY	Lincoln & others

State Correlation

Type Locality

Field Offices

Lyman, Cokeville, Afton, Jackson, Pinedale

Relationship to Other Established Classifications

Other References

Site Description Approval

_____ _____
State Range Management Specialist Date